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United States Environmental Protection Agency
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Environmental Fact Sheet

Hazardous Waste Lamp Rule

Background: *This final rule was published in the Federal Register (FR) on July 6, 1999. (Volume 64, Number 128, pages 36466-36490). The rule became effective in Alaska on January 6, 2000. It will not become effective in Washington, Oregon or Idaho until those States formally adopt the rule. The Universal Waste Rule (UWR) was finalized on May 11, 1995. Subsequently, Oregon adopted the UWR and included fluorescent lamps in their version of the rule. Washington and Oregon have adopted the UWR but did not include fluorescent lamps in their adoption. The Universal Waste Regulations are found in 40 Code of Federal Regulations (CFR), Part 273.*

This fact sheet summarizes some of the main aspects of this rule and how it applies to management of hazardous waste lamps. To ensure that you are in compliance, EPA recommends you read the entire rule. Related information and a copy of the FR are available at http://www.epa.gov/epaoswer/hazwaste/id/merc-emi/merc-emi.htm

Summary:

This final rule adds hazardous waste lamps to the federal list of universal wastes regulated under the Resource Conservation and Recovery Act (RCRA). The UWR is an alternative and less stringent standard for collecting, storing, and transporting of certain hazardous wastes. Examples of universal waste lamps include fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. The hazardous constituent of concern for these lamps is mercury (Hg).

1. What are the universal waste regulations for hazardous waste lamps?

Under the UWR, the term "handler" is used to define those persons and businesses that either first generate a waste lamp or collect quantities of waste lamps before shipment for recycling or disposal. The UWR classifies handlers as small or large quantity handlers. A small quantity handler can accumulate up to 5,000 kg of universal wastes at any time. If a small quantity handler accumulates over 5,000 kg, then they are considered a large quantity handler of universal waste for the remainder of the calendar year in which they exceeded the 5,000 kg quantity. Both types of handlers of universal waste are exempt from the more stringent standards for generators of hazardous waste (i.e., storage quantity limits, accumulation time limits, manifesting, container management standards, etc.). Handlers do have to label and store their universal wastes properly and ensure shipment to a destination facility.

2. What is a destination facility?

A "destination facility" is a facility that legitimately treats, recycles, or disposes of universal wastes. Destination facilities are fully subject to all applicable provisions of RCRA and state programs, including permitting.

3. What about households?

Solid waste from households is not considered hazardous waste under RCRA. [See 40 CFR 261.4(b)(1)] Therefore, material which would otherwise be regulated as hazardous wastes and universal wastes from households are not regulated by the EPA. Because of this, many municipalities have hazardous waste collection programs to gather used batteries, pesticides, waste lamps, etc. from households so that they do not put these wastes into the solid waste landfill.

4. What about conditionally exempt small quantity generators?

If a business generates less than 100 kg of hazardous waste in a month, then they are considered a conditionally exempt small quantity generator (CESQG). A CESQG does not have to include their generation of universal waste in their accounting towards their 100 kg/mo of hazardous waste generation limit. A CESQG has certain options regarding the disposal of their hazardous wastes. The applicable regulations are found in 40 CFR 261.5(g) or authorized State regulations.

5. Can a business use a tube crusher to manage their fluorescent light bulbs?

Yes. However, bulb crushing is considered treatment under RCRA, and treatment is not permissible for handlers of universal waste. If a business decides to crush their bulbs, then they must follow the regulations applicable to generators of hazardous waste. These regulations are in 40 CFR, Part 262. The crushed tubes would be considered to be a generated hazardous waste and would have to be counted to determine generator status.

Since the mercury vapor in the light tube is released and collected in a crushing device, businesses should be aware that worker safety is an issue. The Occupational Safety and Health Administration (OSHA) or corresponding state agencies can regulate the practice.

6. Where can I crush fluorescent light bulbs?

The most common tube crusher fits on the top of a 55-gallon drum. A generator can place a crusher in either their less than 90/180/270 day accumulation area or a satellite accumulation area. In both areas, the generator must comply with the regulations for managing containers. These regulations are found in 40 CFR 262.34 and 40 CFR 265, Subpart I. Generally, crushers managed as satellite areas must be under the control of an operator, but do not have fixed accumulation times. This option might be best for smaller organizations where only a single person is responsible for lamp management. 90/180/270-day accumulation areas, on the other hand, are not subject to an operator control requirement, but are subject to additional requirements such

as labeling and accumulation time limits. Therefore, this option might be better for larger organizations with established waste management programs.

7. How do you handle the filter in a tube crushing device?

There is no regulatory limit for how long a carbon filter can be used before change out. Operators should ensure they carefully follow the manufacturer's instructions, and that they always operate the crushers and the filters to fully capture any mercury vapors. Use of crushers in a way that allows escape of mercury vapors greater than what would be expected from a properly designed and operated unit could be construed as illegal disposal of hazardous wastes, or could result in violations of workplace safety rules under OSHA.

8. Do all lamps have to managed as hazardous or universal waste?

No. Certain "green" or "environmentally friendly" lamps are available that contain less mercury and do not designate as hazardous waste when disposed of. Manufacturer's data sheets may be used as process knowledge for making waste determinations that these spent lamps do not designate as hazardous waste.

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